



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,430	11/13/2001	Matthew F. Ogle	1416.10US01	3022
27367	7590 09/15/2005		EXAMINER .	
WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH			LANKFORD JR, LEON B	
			ART UNIT	PAPER NUMBER
MINNEAPOI	LIS, MN 55402-3319		1651	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Apr	plication No.	Applicant(s)	<del></del>			
Office Action Summary		10/	/008,430	OGLE ET AL.				
		Exa	aminer	Art Unit				
			n Lankford	1651				
Period fo	The MAILING DATE of this communi or Reply	cation appears	on the cover sheet w	with the correspondence ac	ddress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>27 June 2005</u> .							
2a)□	his action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)	·,—							
-	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠	Claim(s) <u>1-35</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-35</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	ion Papers							
9)[	The specification is objected to by the	Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachmen	• •			(27.2.440)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT	ΓO-948)	4) ∐ Interview Paper No	Summary (PTO-413) o(s)/Mail Date				
3) 🔲 Inforr	mation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date	•		Informal Patent Application (PTG	0-152)			

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/27/2005 has been entered.

Applicant's arguments have been fully considered but they are not persuasive to overcome the rejection below (combined to address the amended claims).

Carlyle teaches coating medical devices with VEGF for the effects produced thereby, the examiner still contends that it would have been obvious at the time the invention was made to substitute HIF-1 alpha for the VEGF because the prior art teaches that HIF-1 alpha stimulates the *in vivo* production of the desired compound VEGF.

Applicant's claims require that a compound which stimulates the production of VEGF be associated with the same type of medical device which the prior art clear teach associated with VEGF. Ultimately, applicant's invention arrives at a medical device in association with VEGF for the same benefits taught by the prior art. It is the examiner's contention that claims drawn to devices specifically associated with HIF-1 $\alpha$  along with arguments as to why such a

device is non-obvious over the prior art (e.g. some advantage) could obviate the instant rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlyle et al(99/37337) in view of Semenza et al(6124131) or Tsuzuki et al(Cancer Research, 60, 2000).

Carlyle teaches a medical device on to which VEGF has been attached to promote population of the device with viable cells and other positive results. Carlyle teaches all of the claimed devices in detail through the reference and also details means for attaching the peptide to the device in all the methods applicant claims. The reference teaches all of the claimed limitations except that the reference uses VEGF and does not teach using a VEGF stimulation compound however at the time the invention was made it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a known VEGF stimulation compound for the VEGF used by Carlyle because such a compound would cause the production of the desired compound VEGF. Applicant does not seem to dispute that HIF-1 alpha is a known stimulator of VEGF production. The coating of a VEGF stimulating compound on a medical device would produce the same desired results as sought by Carlyle. Carlyle doesn't teach using HIF- $1\alpha$  as the stimulator/agonist of VEGF, however it would have been obvious at the time the invention was made to use HIF- $1\alpha$  in lieu of VEGF in the process of Carlyle or device of Carlyle because Semenza and Tsuzuki teach that HIF-1 $\alpha$  is a known stimulator of VEGF . There was a reasonable expectation that substituting HIF-1 $\alpha$  for the VEGF in the invention of Carlyle would produce like results.

As the references clearly indicate that the various proportions and amounts of the ingredients used in the claimed device are result effective variables, they would be routinely optimized by one of ordinary skill in the art in practicing the invention disclosed by those references.

Art Unit: 1651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Lankford whose telephone number is 571-272-0917. The examiner can normally be reached on Mon-Thu 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leon B Lankford Jr Primary Examiner